

### Claim Amendments

Claim 1 (currently amended): A method for generating node configuration data, comprising the steps of:

forming a service level agreement template that integrates ~~[[closed]]~~ cloud and pipe service models into a single provisioning model by describing network services in terms of what is experienced by an end user's edge devices and by determining a number of transit QoS constraints, including that network devices supporting the service level agreement in a core network must be bi-connected, respectively, said service level agreement template including a cloud SLA GUI template, cloud SLA defaults, a VPN GUI template, and VPN constraints, said forming including with a computer system, the computer generated steps of:

determining a plurality of traffic classes,

determining at least one required input for a first graphical user interface for each traffic class, and

determining at least one required input for a second graphical user interface;

obtaining service level agreement constraints for at least one service level agreement, said obtaining including

generating said first graphical user interface,

obtaining, through said first graphical user interface, indication of a selected one of said plurality of traffic classes,

obtaining, through said first graphical user interface, at least one value associated with said at least one required input for said first graphical user interface,

generating said second graphical user interface, and

obtaining, through said second graphical user interface, indication of a selected second of said plurality of traffic classes,

obtaining, through said second graphical user interface, at least one value associated with said at least one required input for said second graphical user interface; and

generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

Claim 2 (original): The method of claim 1, further comprising:

determining at least one default equation associated with said first graphical user interface;

applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs;  
and

wherein said generating said node configuration data is further responsive to said first set of outputs.

Claim 3 (currently amended): The method of claim ~~[[1]]~~ 2, said forming said service level agreement template further comprising:

determining at least one optional input for said first graphical user interface;

determining at least one format of at least one screen display in said first graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said first graphical user interface and a second field associated with said optional input for said second graphical user interface; and

wherein said generating said first graphical user interface includes displaying said at least one screen display.

Claim 4 (currently amended): The method of claim ~~[[2]]~~ 3, wherein said at least one default equation comprises program code.

Claim 5 (currently amended): The method of claim ~~[[1]]~~ 4, wherein said determining said at least one required input for said second graphical user interface further comprises determining required information describing at least one resource associated with at

least one networking device, wherein said required information associated with said at least one resource describes, at least in part, a virtual private network.

Claim 6 (original): The method of claim 5, wherein said required information describing said at least one resource comprises a virtual network identifier.

Claim 7 (currently amended): The method of claim ~~[[5]]~~ 6, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one networking device and a second networking device.

Claim 8 (currently amended): The method of claim ~~[[1]]~~ 7, wherein said forming said service level agreement template further includes:

determining at least one optional input for said second graphical user interface,

determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface; and

wherein said generating said second graphical user interface includes displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

Claim 9 (currently amended): The method of claim [[1]] 8, wherein said forming a service level agreement template comprises receiving at least one input through a third graphical user interface.

Claim 10 (currently amended): A system for generating node configuration data, comprising:

at least one memory for storing program code;

at least one processor, communicably coupled to said memory, said at least one processor operable to execute program code stored in said memory;

program code, stored in said memory, for forming a service level agreement template that integrates [[closed]] cloud and pipe service models into a single provisioning model by describing network services in terms of what is experienced by an end user's edge devices and by determining a number of transit QoS constraints, including that network

devices supporting the service level agreement in a core network must be bi-connected,  
respectively, said service level agreement template including a cloud SLA GUI template, cloud  
SLA defaults, a VPN GUI template, and VPN constraints, said program code for forming said  
service level agreement template including

program code for determining a plurality of traffic classes,

program code for determining at least one required input for a first graphical  
user interface, and

program code for determining at least one required input for a second graphical  
user interface;

program code, stored in said memory, for obtaining service level agreement  
constraints for at least one service level agreement, said program code for obtaining including  
said service level agreement constraints including

program code for generating said first graphical user interface,

program code for obtaining, through said first graphical user interface, indication of a selected one of said plurality of traffic classes,

program code for obtaining, through said first graphical user interface, at least one value associated with said at least one required input for said first graphical user interface,

program code for generating said second graphical user interface, and

program code for obtaining, through said second graphical user interface, indication of a selected second of said plurality of traffic classes,

program code for obtaining, through said second graphical user interface, at least one value associated with said at least one required input for said second graphical user interface; and

program code, stored in said memory, for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least



one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

Claim 11 (original): The system of claim 10, further comprising:

program code for determining at least one default equation associated with said first graphical user interface;

program code for applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs; and

wherein said program code for generating said node configuration data is further responsive to said first set of outputs.

Claim 12 (currently amended): The system of claim ~~[[10]]~~ 11, said program code for forming said service level agreement template further comprising:

program code for determining at least one optional input for said first graphical user interface;

program code for determining at least one format of at least one screen display in said first graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said first graphical user interface and a second field associated with said optional input for said second graphical user interface; and

wherein said program code for generating said first graphical user interface includes program code for displaying said at least one screen display.

Claim 13 (currently amended): The system of claim ~~[[11]]~~ 12, wherein said at least one default equation comprises program code.

Claim 14 (currently amended): The system of claim ~~[[10]]~~ 13, wherein said program code for determining said at least one required input for said second graphical user interface further comprises program code for determining required information describing at least one resource associated with at least one networking device, wherein said required information associated with said at least one resource describes, at least in part, a virtual private network.

Claim 15 (original): The system of claim 14, wherein said required information describing said at least one resource comprises a virtual network identifier.

Claim 16 (currently amended): The system of claim ~~[[14]]~~ 15, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one networking device and a second networking device.

Claim 17 (currently amended): The system of claim ~~[[10]]~~ 16, said program code for forming said service level agreement template further comprising:

program code for determining at least one optional input for said second graphical user interface;

program code for determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface;  
and

wherein said program code for generating said second graphical user interface includes program code for displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

Claim 18 (currently amended): The system of claim ~~[[10]]~~ 17, wherein said program code for forming a service level agreement template comprises program code for receiving at least one input through a third graphical user interface.

Claim 19 (currently amended): A system for generating node configuration data, comprising:

means for forming a service level agreement template that integrates ~~[[closed]]~~ cloud and pipe service models into a single provisioning model by describing network services in terms of what is experienced by an end user's edge devices and by determining a number of transit QoS constraints, including that network devices supporting the service level agreement in a core network must be bi-connected, respectively, said service level agreement template including a cloud SLA GUI template, cloud SLA defaults, a VPN GUI template, and VPN constraints, said program code for forming said service level agreement template including

means for determining a plurality of traffic classes,

means for determining at least one required input for a first graphical user interface, and

means for determining at least one required input for a second graphical user interface;

means for obtaining service level agreement constraints for at least one service level agreement, said means for obtaining including said service level agreement constraints including

means for generating said first graphical user interface,

means for obtaining, through said first graphical user interface, indication of a selected one of said plurality of traffic classes,

means for obtaining, through said first graphical user interface, at least one value associated with said at least one required input for said first graphical user interface,

means for generating said second graphical user interface, and

means for obtaining, through said second graphical user interface, indication of a selected second of said plurality of traffic classes,

means for obtaining, through said second graphical user interface, at least one value associated with said at least one required input for said second graphical user interface; and

means for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.